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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b> <i>FIXED</i>		Docket Number (Optional) 200308296-1	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>November 17, 2005</u> Signature <u><i>Albert C. Metrailler</i></u> Typed or printed name <u>Albert C. Metrailler</u>		Application Number <u>09/418,418</u>	Filed <u>10/15/1999</u>
		First Named Inventor <u>Krishna A. BHARAT et al.</u>	
		Art Unit <u>2172</u>	Examiner <u>B. N. To</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/98) <input checked="" type="checkbox"/> attorney or agent of record. <u>27,145</u> Registration number <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34		<u><i>Albert C. Metrailler</i></u> Signature <u>Albert C. Metrailler</u> Typed or printed name <u>(713) 238-8000</u> Telephone number <u>November 17, 2005</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input checked="" type="checkbox"/> Total of <u>one (1)</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.8. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Krishna A. BHARAT et al.	§	Confirmation No.:	8878
		§		
Serial No.:	09/418,418	§	Group Art Unit:	2172
		§		
Filed:	10/15/1999	§	Examiner:	B. N. To
		§		
For:	Method For Ranking	§	Docket No.:	200308296-1
	Hypertext Search Results	§		
	By Analysis Of Hyperlinks	§		
	From Expert Documents	§		
	And Keyword Scope	§		

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**Mail Stop AF**  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Date: November 17, 2005

Sir:

Appellants hereby submit this Pre-Appeal Brief Request for Review in connection with the above-identified application. A Notice of Appeal is filed concurrently herewith.

The appealed Claims 1-12 and 14-23 are listed in the response filed July 20, 2005.

In the final Office action of October 5, 2005, claims 1-12 and 14-23 were rejected by incorporating the grounds for the rejections in the Office Action of April 21, 2005 as discussed below. The Appellants respectfully traverse the rejections. Reconsideration is requested.

Claims 1-4, 20, and 21-23 were rejected under 35 U.S.C.103(a) as being obvious over Chakrabarti et al. (Automatic resource compilation by analyzing hyperlink structure and associated text, April 14, 1998) in view of Page U.S. Patent No. 6,285,999 B1.

Regarding claims 1, 20, and 21, the independent claims, the Examiner alleges that Chakrabarti teaches:

ranking the expert documents in accordance with the search query by hub

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score;  
ranking target documents pointed to by the ranked expert documents  
(authority page and ranking page); and  
returning a results list based on the ranked expert documents.

The Examiner notes that Chakrabarti does not explicitly teach forming a set of expert documents from the set of all hypertext documents crawled without reference to the search query, but asserts that Page discloses forming a set of expert documents from the set of all hypertext documents crawled without reference to the search query (col. 2, lines 51-54).

The Examiner then asserts that it would have been obvious to include crawling and ranking the crawled documents based on the measure of importance into Chakrabarti in order to organize relevancy of documents in the world wide web to assist the user in the search process.

The Appellants disagree with the Examiner's interpretations of Chakrabarti and Page. The Appellants submit that there is no suggestion in the either reference to combine the references. The Appellants submit that no combination of the references would result in a system that would make the present invention obvious.

As noted by the Examiner, Chakrabarti does not teach forming a set of experts from all documents searched without reference to a search topic. In fact, Chakrabarti does not teach forming a set of experts at all. Chakrabarti only teaches ranking of subsets of documents that are produced in topic based searches, i.e., ranking documents that relate to a particular topic.

As described in Section 2, Algorithm, Chakrabarti starts his process by submitting a topic to a term based search engine, in this case AltaVista. From this search, Chakrabarti obtains a root set of about 200 documents containing the topic term(s). The root set is augmented by adding all documents that point to the root set and those that are pointed to by the root set. Augmenting is done twice to include all documents within a link distance of two. In Section 2.2, Chakrabarti suggests that multiple augmented sets for various topics may be stored. Chakrabarti also states that the principal bottleneck in his process will be crawling the web and extracting all the root and augmented sets. Chakrabarti, in

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essence, teaches forming a topic based subdivision or index of the web.

Chakrabarti in Section 1.1 notes that the use of linking to rank documents is known. Chakrabarti then teaches various prior art link based algorithms that he uses to build his specific link based ranking system. In Section 2, Chakrabarti discloses his specific linked based ranking system that he uses to rank the augmented sets previously produced, i.e., sets already limited to a particular topic. In this description, Chakrabarti describes modifications made "so as to maintain the focus on the topic." He notes further that the mechanism described in Section 2.1 assumes "that this topic-dependent link weighting has been done."

Therefore, all of the searching and ranking taught by Chakrabarti includes or is based on a specific topic, i.e., a search query. Chakrabarti never teaches forming a set of expert documents from all hypertext documents without reference to a search query. Chakrabarti does not teach ranking expert documents, but instead ranking a topic based subset of documents. Chakrabarti returns a set of ranked documents based on his augmented set that includes documents pointing to his root set, the root set itself, and documents pointed to by the root set. Chakrabarti does not teach returning a results list based on the ranked target documents, that would correspond to a portion of, but not all of, his augmented list.

Page teaches a particular algorithm for assigning nodes in a link based database. Ranking is link based, as discussed above with reference to Chakrabarti. The portion of Page cited by the Examiner, col. 2, lines 51-54, merely states that the invention is based on use of the linked structure of a database to assign a rank to each document. As noted in the following sentence, this is in addition to determining relevance based on the intrinsic content and the anchor text, both of which are topic based. Thus, Page does not teach ranking all documents crawled without reference to a search query. Page teaches an improvement to topic based searching.

At col. 7, lines 37-55, Page teaches an implementation in which a user's homepage and/or bookmarks are given a large initial importance. This indicates to the system that the homepage and/or bookmarks contain subjects, i.e., topics,

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of high importance. This trains the system to recognize pages related to the person's interests, i.e., certain topics. Thus, Page teaches including topics in the ranking process, not ranking without reference to the topic.

At col. 8, lines 6-20 another application is described in which "a web crawler explores the web and creates an index of the web content, as well as a directed graph of nodes corresponding to the structure of hyperlinks. The nodes of the graph (i.e., pages of the web) are then ranked according to importance as described above in connection with various exemplary embodiments of the present invention." Thus, the teaching of Page is essentially the same as the teachings of Chakrabarti, i.e., after forming a subset of web documents based on a topic, a link based ranking system is used to rank the subset of documents.

Thus, neither Chakrabarti nor Page teach forming a set of expert documents from the set of all hypertext documents crawled without reference to the search query. Therefore, no combination of Chakrabarti and Page could teach forming a set of expert documents from the set of all hypertext documents crawled without reference to the search query.

In claims 1, 20 and 21, the set of expert documents is first formed without reference to a topic or search query. In the second step, the expert documents are ranked based on the search query. Then, target documents pointed to by the ranked experts are ranked and results based on the ranking of the target documents are returned. Since neither Chakrabarti nor Page teach forming a set of expert documents without reference to a search query, they cannot teach ranking such a set of expert documents.

No combination of Chakrabarti and Page could teach such a process, since they both start with topic based searches. The only reasonable combination of Chakrabarti and Page would be to substitute Page's specific link based ranking system for the ranking system taught by Chakrabarti. That ranking system is used to rank a topic based subset of documents.

Several advantages of the presently claimed invention illustrate the substantial differences from the references. As noted by Chakrabarti, the main bottleneck in its process is crawling the web and extracting the root and

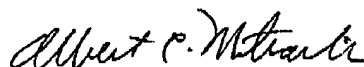
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augmented sets. Since Chakrabarti starts with a topic, the process cannot begin until the query, i.e., the topic, is received. In the present invention, the first step of forming a set of expert documents can be performed at any time prior to receipt of a query, since it is performed "without reference to the search query." In one embodiment, this step would be performed at a time when the computer resources and the Internet are not otherwise in heavy use. For example, this step could be performed once a day during early morning hours. The resulting expert set could then be used each time a search query is received later in the day without having to crawl the entire web again. This process improves the efficiency of use of available computer resources and reduces the time between receipt of a search query and returning a results list to the requestor.

In view of these substantial differences, the Appellants submit that the independent Claims 1, 20 and 21 are patentable over the prior art. Since the remaining claims are all dependent claims which further limit Claims 1, 20 or 21, the Appellants submit that the dependent claims are also patentable over the prior art.

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,



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